

Index of Elements for Drywall Butt Joint System

ENVIRONMENTAL ELEMENTS

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10. Drywall Butt Joint System

- 11.
- 12. Stud
- 13.
- 14. Drywall Sheets
- 15.
- 16. Fasteners
- 17.
- 18.
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20. Middle Section

- 21.
- 22. Inner Surface
- 23.
- 24. Outer Surface
- 25.
- 26.
- 27.
- 28.
- 29.

30. First Angled Section

- 31.
- 32. Second Angled Section
- 33.
- 34.
- 35.
- 36.
- 37.
- 38.
- 39.

40. First Section

- 41.
- 42. Second Section
- 43.
- 44.
- 45.
- 46.
- 47.
- 48.
- 49.

50. First Support

- 51.
- 52. Second Support
- 53.
- 54.
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APPLICATION

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FOR UNITED STATES LETTERS PATENT

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SPECIFICATION

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TO ALL WHOM IT MAY CONCERN:

20 BE IT KNOWN THAT I, **Edward A. Talbacka**, a citizen of the United States, have invented a new and useful drywall butt joint system of which the following is a specification:

Drywall Butt Joint System

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CROSS REFERENCE TO RELATED APPLICATIONS

Not applicable to this application.

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STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

Not applicable to this application.

BACKGROUND OF THE INVENTION

Field of the Invention

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The present invention relates generally to back-blocking devices and more specifically it relates to a drywall butt joint system for efficiently recessing a butt joint between two sheets of drywall.

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Drywall installation requires the adjoining edges of drywall sheets to be taped. The installer first applies a layer of joint compound or plaster upon the butt joint of the opposing drywall sheets and then secures a length of drywall tape to the butt joint. The installer then applies another layer of joint compound upon the drywall tape and additional layers at a later time if required to completely fill in the butt joint. It is not

uncommon for the butt joint to be visibly "raised" from the wall thereby creating a non-flat appearance for the wall or ceiling where the butt joint was taped. One solution to this problem is to cutout a V-shaped structure within the butt joints to create a recessed portion for receiving the tape and joint compound. Hence, there is a need for
5 an effective system that reduces the bulging effect from the butt joints.

Description of the Prior Art

510 Drywall "back-blocking" devices and systems have been in use for years. A typical back-blocking device is comprised of an elongate center member (typically comprised of wood) with a plurality of U-shaped members (typically comprised of rigid metal) extending outwardly from opposing sides of the elongate center member. The distal ends of the U-shaped members are withdrawn slightly with respect to the inner surface of the center member thereby causing the edges of the drywall to be drawn inwardly when fasteners are extended through the drywall into the distal ends of the U-shaped members. After the drywall is fully secured to the wall and the back-blocking device is fully attached, the user then applies the tape and joint compound as stated previously for filling the butt joint.

20 The main problem with conventional back-blocking devices is that they are expensive to construct. Another problem with conventional back-blocking devices is that they are difficult to efficiently utilize. A further problem with conventional back-blocking devices is that they require a relatively significant amount of time to install
25 making them impractical to utilize by drywall installers.

Examples of patented devices which are related to the present invention include U.S. Patent 5,657,599 to Peterson; U.S. Patent 6,108,990 to Klamer; U.S. Patent

4,392,336 to Ganssse; U.S. Patent 5,799,458 to Ferguson; U.S. Patent 5,832,684 to Trout; U.S. Patent 3,675,383 to Paoletti; and U.S. Patent 4,237,669 to Hunter.

5 While these devices may be suitable for the particular purpose to which they address, they are not as suitable for efficiently recessing a butt joint between two sheets of drywall. Conventional back-blocking devices are costly, ineffective and difficult to install for many users.

In these respects, the drywall butt joint system according to the present invention substantially departs from the conventional concepts and designs of the prior art, and in so doing provides an apparatus primarily developed for the purpose of efficiently recessing a butt joint between two sheets of drywall.

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SUMMARY OF THE INVENTION

In view of the foregoing disadvantages inherent in the known types of back-blocking devices now present in the prior art, the present invention provides a new drywall butt joint system construction wherein the same can be utilized for efficiently recessing a butt joint between two sheets of drywall.

The general purpose of the present invention, which will be described subsequently in greater detail, is to provide a new drywall butt joint system that has many of the advantages of the back-blocking device mentioned heretofore and many novel features that result in a new drywall butt joint system which is not anticipated, rendered obvious, suggested, or even implied by any of the prior art back-blocking devices, either alone or in any combination thereof.

To attain this, the present invention generally comprises an elongate structure having a middle section, a first angled section and a second angled section extending from opposing edges of the middle section, and a first section and a second section extending from the opposing angled sections substantially parallel to the middle section. A first support and a second support are preferably attached to the outer edges of the first section and second section respectively in a manner traverse to the middle section thereby increasing the overall strength of the drywall butt joint system. The elongate structure is preferably roll formed from a sheet of metal for increased strength and decreased manufacturing cost.

There has thus been outlined, rather broadly, the more important features of the invention in order that the detailed description thereof may be better understood, and in order that the present contribution to the art may be better appreciated. There are additional features of the invention that will be described hereinafter and that will form

the subject matter of the claims appended hereto.

In this respect, before explaining at least one embodiment of the invention in detail, it is to be understood that the invention is not limited in its application to the 5 details of construction and to the arrangements of the components set forth in the following description or illustrated in the drawings. The invention is capable of other embodiments and of being practiced and carried out in various ways. Also, it is to be understood that the phraseology and terminology employed herein are for the purpose of the description and should not be regarded as limiting.

10 A primary object of the present invention is to provide a drywall butt joint system that will overcome the shortcomings of the prior art devices.

15 A second object is to provide a drywall butt joint system for efficiently recessing a butt joint between two sheets of drywall.

Another object is to provide a drywall butt joint system that is easy and time efficient to install.

20 An additional object is to provide a drywall butt joint system that may be utilized upon various types of drywall.

A further object is to provide a drywall butt joint system that may be manufactured at an economical cost.

25 Another object is to provide a drywall butt joint system that is economical to install.

A further object is to provide a drywall butt joint system that is comprised of a simple construction that is easy to manufacture.

Other objects and advantages of the present invention will become obvious to the reader and it is intended that these objects and advantages are within the scope of the present invention.

To the accomplishment of the above and related objects, this invention may be embodied in the form illustrated in the accompanying drawings, attention being called to the fact, however, that the drawings are illustrative only, and that changes may be made in the specific construction illustrated and described within the scope of the appended claims.

BRIEF DESCRIPTION OF THE DRAWINGS

Various other objects, features and attendant advantages of the present
5 invention will become fully appreciated as the same becomes better understood when
considered in conjunction with the accompanying drawings, in which like reference
characters designate the same or similar parts throughout the several views, and
wherein:

10 FIG. 1 is an upper perspective view of the first side of the present invention.

15 FIG. 2 is an upper perspective view of the second side of the present invention.

FIG. 3 is an upper perspective view of the present invention secured within a
20 butt joint between to drywall sheets.

FIG. 4 is a magnified upper perspective view of the present invention secured
within the butt joint causing the butt joint to become recessed.

25 FIG. 5 is an end view of the present invention.

FIG. 6 is a cross sectional view taken along line 6-6 of Figure 3.

FIG. 7 is a top view of the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Turning now descriptively to the drawings, in which similar reference characters denote similar elements throughout the several views, FIGS. 1 through 7 illustrate a drywall butt joint system **10**, which comprises an elongate structure having a middle section **20**, a first angled section **30** and a second angled section **32** extending from opposing edges of the middle section **20**, and a first section **40** and a second section **42** extending from the opposing angled sections substantially parallel to the middle section **20**. A first support **50** and a second support **52** are preferably attached to the outer edges of the first section **40** and second section **42** respectively in a manner traverse to the middle section **20** thereby increasing the overall strength of the drywall butt joint system **10**. The elongate structure is preferably roll formed from a sheet of metal for increased strength and decreased manufacturing cost.

As shown in Figures 1, 2 and 7, the drywall butt joint system **10** is comprised of a rectangular elongate structure having various lengths and widths. The drywall butt joint system **10** is preferably manufactured from a flat solid sheet of metal that is roll formed, however the system **10** may be manufactured utilizing other well known manufacturing methods such as but not limited to plastic extrusion.

As best shown in Figures 1, 2 and 7 of the drawings, the elongate structure has a middle section **20**. The middle section **20** preferably has a flat rectangular shape as shown in Figures 5 and 7 of the drawings. The middle section **20** has an inner surface **22** that faces the drywall sheets **14** when installed and an outer surface **24** opposite of the inner surface **22** as shown in Figures 1 through 3 of the drawings. The length of the middle section **20** is preferably greater than the width of the middle section **20**. The width of the middle section **20** is preferably at least six inches to extend across a butt joint of two drywall sheets **14** as shown in Figure 6 of the drawings.

As shown in Figures 1, 2, 4, 5, 6 and 7 of the drawings, the first angled section 30 and the second angled section 32 extend at an angle from opposing edges of the middle section 20. The angled sections 30, 32 extend outwardly from the inner surface 22 as best shown in Figures 2, 5 and 6 of the drawings. The angled sections 30, 32 preferably have a width of at least one inch and extend the entire length of the middle section 20 as shown in Figures 1, 2 and 7 of the drawings. The angled sections 30, 32 have an obtuse angle with respect to the inner surface 22 as shown in Figures 5 and 6 of the drawings. The angle between the angled sections 30, 32 and the inner surface 22 of the middle section 20 is preferably at least 110 degrees.

As shown in Figures 1, 2, 4, 5, 6 and 7 of the drawings, the first section 40 and the second section 42 extend from the opposing angled sections 30, 32 substantially parallel to the middle section 20 along the entire length of the angled sections 30, 32. The first section 40 and the second section 42 preferably have a flat structure similar to the middle section 20. The first section 40 and the second section 42 are formed to engage the surface of the drywall sheets 14 as shown in Figure 6 of the drawings. The first section 40 and the second section 42 are a finite traverse distance forward with respect to the middle section 20 as shown in Figures 5 and 6 of the drawings. The finite traverse distance between the sections 40, 42 and the middle section 20 is preferably at least 0.5 inches to allow for drawing of the edge portions of the drywall sheets 14 inwardly as shown in Figure 6 of the drawings.

As shown in Figures 1, 5 and 6 of the drawings, the first support 50 and the second support 52 preferably extend from the outer edges of the first section 40 and second section 42 respectively in a manner substantially traverse to the sections 40, 42 thereby increasing the overall strength of the drywall butt joint system 10. The first support 50 and the second support 52 preferably have a width of at least 0.5 inches.

The supports 50, 52 preferably extend along the entire length of the sections 40, 42 as shown in Figure 1 of the drawings.

In use, the user secures the drywall sheets 14 to a plurality of wall studs 12 with conventional fasteners 16 such as nails or screws. At the butt joint created between adjacent drywall sheets 14, the user positions the drywall butt joint system 10 within the inner portion of the drywall sheets 14 as shown in Figures 3, 4 and 6 of the drawings. The user then inserts threaded fasteners 16 into the outer portion of the drywall sheets 14 adjacent the butt joint and into the middle section 20 as shown in Figures 4 and 6 of the drawings. When the head portions of the fasteners 16 engage the outer portion of the drywall sheets 14, the edges of the drywall sheets 14 are drawn inwardly forming a depressing as shown in Figures 4 and 6 of the drawings. The user continues this process with a plurality of fasteners 16 until the butt joint has a consistent recessed structure thereto. The user then is able to apply drywall tape and joint compound as required to fill the butt joint depression. It can be appreciated that the middle section 20 may include a plurality of apertures for receiving the fasteners 16.

As to a further discussion of the manner of usage and operation of the present invention, the same should be apparent from the above description. Accordingly, no further discussion relating to the manner of usage and operation will be provided.

With respect to the above description then, it is to be realized that the optimum dimensional relationships for the parts of the invention, to include variations in size, materials, shape, form, function and manner of operation, assembly and use, are deemed to be within the expertise of those skilled in the art, and all equivalent structural variations and relationships to those illustrated in the drawings and described in the specification are intended to be encompassed by the present invention.

Therefore, the foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention.

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